



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

*mv*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,897	06/07/2005	Ana Isabel Sanz Molinero	BJS-4982-5	8027

23117 7590 05/30/2007  
NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER
----------

BAUM, STUART F

ART UNIT	PAPER NUMBER
----------	--------------

1638

MAIL DATE	DELIVERY MODE
-----------	---------------

05/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/537,897

Applicant(s)

SANZ MOLINERO, ANA ISABEL

Examiner

Stuart F. Baum

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-42 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 4, 10-17, 19-20, 29-34, drawn to a method for increasing plant yield comprising modifying expression in a plant of a nucleic acid sequence encoding a 2xC2H2 zinc finger protein and/or modifying the level or activity of a 2xC2H2 zinc finger protein, wherein said modifying is effected by recombinant means, or wherein said recombinant mean comprises transforming a plant with a nucleic acid encoding a protein comprising a 2xC2H2 zinc, or wherein the nucleic acid is SEQ ID NO:1 or a homologue thereof; and plant obtained by said method.

Group II, claim(s) 4, drawn to drawn to a method for increasing plant yield comprising modifying expression in a plant of a nucleic acid sequence encoding a 2xC2H2 zinc finger protein and/or modifying the level or activity of a 2xC2H2 zinc finger protein, wherein said modifying is effected by chemical means.

Group III, claim(s) 5, drawn to a method for increasing plant yield comprising modifying expression in a plant of a nucleic acid sequence encoding a 2xC2H2 zinc finger protein and/or

Art Unit: 1638

modifying the level or activity of a 2xC2H2 zinc finger protein, wherein said modifying is effected by recombinant means, wherein the protein comprises a QALGGH motif.

Group IV, claim(s) 6, drawn to a method for increasing plant yield comprising modifying expression in a plant of a nucleic acid sequence encoding a 2xC2H2 zinc finger protein and/or modifying the level or activity of a 2xC2H2 zinc finger protein, wherein said modifying is effected by recombinant means, wherein the protein comprises a NNM(W)QMH motif.

Group V, claim(s) 7, drawn to a method for increasing plant yield comprising modifying expression in a plant of a nucleic acid sequence encoding a 2xC2H2 zinc finger protein and/or modifying the level or activity of a 2xC2H2 zinc finger protein, wherein said modifying is effected by recombinant means, wherein the protein comprises an EAR motif.

Group VI, claim(s) 8, drawn to a method for increasing plant yield comprising modifying expression in a plant of a nucleic acid sequence encoding a 2xC2H2 zinc finger protein and/or modifying the level or activity of a 2xC2H2 zinc finger protein, wherein said modifying is effected by recombinant means, wherein the protein comprises a B-box.

Group VII, claim(s) 9, drawn to a method for increasing plant yield comprising modifying expression in a plant of a nucleic acid sequence encoding a 2xC2H2 zinc finger protein and/or modifying the level or activity of a 2xC2H2 zinc finger protein, wherein said modifying is effected by recombinant means, wherein the protein comprises a L-box.

Group VIII, claim(s) 18, drawn to a method for increasing plant yield comprising modifying expression in a plant of a nucleic acid sequence encoding a 2xC2H2 zinc finger protein and/or modifying the level or activity of a 2xC2H2 zinc finger protein, wherein said

Art Unit: 1638

modifying is effected by recombinant means, wherein said modifying expression comprises increased expression.

Claim 1-3, 12, 21-23 link(s) inventions I-VIII. The restriction requirement between the linked inventions is **subject to** the nonallowance of the linking claim(s), claim 1-3, 12, 21-23. Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions **shall** be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104 **Claims that require all the limitations of an allowable linking claim** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, the allowable linking claim, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Art Unit: 1638

Group IX, claims 24-28, drawn to a construct comprising a nucleic acid capable of modifying expression of a nucleic acid encoding a 2xC2H2 zinc finger protein and host cell comprising said construct.

Group X, claims 35, 37-42, drawn to use of a nucleic acid encoding a 2xC2H2 protein.

Group XI, claim 36, drawn to a regulating composition comprising a 2xC2H2 protein.

2. The inventions listed as Groups I-XI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: modifying expression in a plant of a nucleic acid sequence encoding a 2xC2H2 zinc finger protein is taught in the prior art. Sakamoto et al (2000, Gene 48:23-32) teach the cloning of three AZF genes from Arabidopsis and that the AZF encoded proteins contain two canonical Cys2/His2 type zinc finger motifs (abstract). Sakamoto et al disclose that salt stress, low temperature or elevated levels of ABA increase the expression of AZF genes (abstract). In addition, Sakamoto et al disclose that the AZF genes should open up a new way of improving the fitness of plants in water-deficit environment (page 31, right column, last sentence). The Office contends that the disclosure of Sakamoto et al reads on Applicants' broadly claimed invention because the only method step in Applicants' invention, i.e., claim 1 is modifying expression of a nucleic acid encoding a 2xC2H2 protein. The Office contends, Sakamoto et al disclose said method.

3. In addition, the claims are not linked by a single technical feature because Applicants' chemical compounds, i.e., different DNA sequences encoding different polypeptides, each have different properties and different core structures that elicit different activities; and as such, the Groups I-XI are not linked by, or share, a single special technical feature.

Art Unit: 1638

4. Each of Inventions I-XI are capable of being separately made, independently used and the patentability of one does not render the others obvious or unpatentable.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart F. Baum whose telephone number is 571-272-0792. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1638

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

A handwritten signature in black ink, appearing to read "Stuart F. Baum". The signature is fluid and cursive, with the first name "Stuart" written in a more compact, stylized manner and the last name "Baum" written more fully.

Stuart F. Baum Ph.D.

Primary Examiner

Art Unit 1638

May 28, 2007

STUART F BAUM, PH.D.  
PRIMARY EXAMINER